Introduced by Senator Battin

March 29, 2005

Senate Concurrent Resolution No. 35—Relative to Polio Awareness Day.

LEGISLATIVE COUNSEL'S DIGEST

SCR 35, as introduced, Battin. Polio Awareness Day.

This measure would declare April 12, 2005, to be Polio Awareness Day, a day to commemorate the development of the polio vaccine and to acknowledge polio survivors.

Fiscal committee: no.

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WHEREAS, Anyone over the age of 50 years is likely to remember the terror of polio. Beaches were closed at the height of summer because the crippling, contagious disease seemed to spread through contact with water. Adults and children saw their lives become a nightmare of isolation wards, spinal taps, braces, orthopedic surgeries, social stigma, and confinement inside an iron lung — sometimes for years — just to breathe; and

WHEREAS, At the time, polio was seen as a disease of immigrants in primitive, filthy living conditions. Public health officials enacted strict sanitation policies. But as the 20th century progressed, polio (once called "infantile paralysis") began striking older children and adults, and disproportionately hit the middle class. Scientists now believe that improved sanitation was to blame. When water supplies were consistently contaminated with the poliovirus, as they were in impoverished areas, people were typically infected during infancy, but most suffered little more than diarrhea, and then had lifelong immunity against polio. In contrast, middle-class people with access to clean drinking water might not encounter the virus until later in childhood, when

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the virus was more likely to spread to the brain and spinal cord
and cause paralysis; and
WHEREAS, The so-called iron lung was the first effective

WHEREAS, The so-called iron lung was the first effective treatment for patients so severely paralyzed they couldn't breathe. First used in 1928 on an 8-year-old girl with polio at Children's Hospital Boston, it consisted of a tank made by a local tinsmith and a pair of vacuum cleaner blowers. As the machine breathed for her, the girl revived and later asked for ice cream. Later, as demand grew, hospitals moved to room-sized respirators. Former patients can describe living in respirators for months on end, never leaving to be bathed or changed, eating flat on their backs, relying on nurses to feed them and mirrors to see around them. During power outages, hospital staff, including doctors, took turns pumping the respirators with a bellows; and

WHEREAS, A vaccine was desperately needed, but before Dr. Jonas Salk could create one there needed to be a practical way to grow poliovirus in quantity in the lab. In the late 1940s, the virus could only be grown in nerve tissue, which is difficult to maintain, or in live monkeys, a laborious and costly approach. Although Dr. Salk is famous for developing the polio vaccine, John Enders, Thomas Weller, and Frederick Robbins of Children's Hospital Boston were the first to culture poliovirus in a variety of tissues — under primitive lab conditions — earning them a Nobel Prize in 1954; and

WHEREAS, This critical step, which enabled Salk to develop a vaccine, was accomplished on a shoestring budget in a makeshift lab. John Enders and colleagues initially had no protective apparatus, had no sterile hoods for working with viruses, and had to book glassware for experiments in advance since there was not enough to go around. They made do by being creative: Thomas Weller purchased a \$15,000 autoclave at auction for \$25, and two craftsmen in the building built them some primitive equipment; and

WHEREAS, On April 12, 1955, the Salk polio vaccine was announced. Within a few years, polio virtually disappeared. Polio was declared eradicated in the United States in 1979. Yet according to the World Health Organization, polio cases worldwide rose by one-third in 2004, due in part to a vaccine boycott; now, therefore, be it

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Resolved by the Senate of the State of California, the Assembly thereof concurring, That the Legislature declares April 12, 2005, to be Polio Awareness Day, a day to commemorate the development of the polio vaccine and to acknowledge polio survivors; and be it further

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Resolved, That the Secretary of the Senate transmit copies of this resolution to the author for appropriate distribution.